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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/894,675	06/28/2001	Lutz Melchior	IT-273	6394

7590 06/13/2002  
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EXAMINER
WOOD, KEVIN S

ART UNIT	PAPER NUMBER
2874	

DATE MAILED: 06/13/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/894,675

Applicant(s)

MELCHIOR ET AL.

Examiner

Kevin S Wood

Art Unit

2874

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-5, 7-27 and 29-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-5, 7-27, 29 and 31-34 is/are allowed.
- 6) ☒ Claim(s) 30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 10.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Response to Amendment*

1. This action is responsive to amendment A filed 4/4/02. Claims 6 and 28 are now canceled and new claims 30-34 are added. Claims 1-5, 7-27 and 29-34 are now pending in the application.
2. Based on applicant's amendment, the rejections of claim 1 and 17 under 35 USC 112, second paragraph, are withdrawn.

### *Response to Arguments*

3. Applicant's arguments have been fully considered by the examiner. The applicant argues that claims 1-34 are allowable over the prior art. The applicant states that the allowable subject matter indicated in claim 6 has been added to independent claim 1, making claim 1 and all claims dependent upon it allowable over the prior art. The examiner agrees that amended claim 1 and all claims dependent from claim 1 are now allowable over the prior art.  
  
The applicant argues that claims 15, 20, 25 and 29, have been rewritten into independent form and are now allowable over the prior art. The examiner agrees that amended claims 15, 20, 25, and 29 are now allowable over the prior art.  
  
The applicant's arguments with respect to claim 17 being allowable over the prior art are moot, claim 17 is dependent upon claim 1, and is therefore allowable for the same reasons as claim 1.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claim 30 is rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 4,701,012 to Kaiser.

Referring to claim 30, Kaiser discloses all the limitations of the claimed invention. Kaiser discloses: an optical waveguide forming a plurality of sections (105-109); a plurality of components consisting of transmitting components (24-28); each waveguide section having an inclined surface; each one of the optical components being associated with an inclined surface of one of the plurality of waveguide sections; each component having an optical axis essentially perpendicular to the optical axis of an associated waveguide section. See Fig. 1, along with the respective portion of the specification. It is clear that the waveguides (24-28) are optical components that transmit light.

***Allowable Subject Matter***

6. Claims 1-5, 7-27, 29 and 31-34 are allowed.
7. The following is a statement of reasons for the indication of allowable subject matter:

Referring to claims 1-5, 7-14, 17-19, 24, 26 and 27, the prior art does not disclose all the limitations of the claimed invention. The prior art does not disclose the electro-optical module as claimed, including: a first glass ferrule; a second glass ferrule; where the first glass ferrule receives the first optical waveguide section and has an end surface that is inclined to correspond to the inclined end surface of the first optical waveguide section; where the second glass ferrule receives the second optical waveguide section and has an end surface that is inclined to correspond to the inclined end surface of the second optical waveguide section; and where both ferrules are transparent.

Referring to claims 15 and 16, the prior art does not disclose all the limitations of the claimed invention. The prior art does not disclose the electro-optical module as claimed, including: the first optical waveguide section and the second optical waveguide section defining a gap therebetween; and an immersion means filling the gap, and having a matched refractive index.

Referring to claims 20-23, the prior art does not disclose all the limitations of the claimed invention. The prior art does not disclose the electro-optical module as claimed, including: a To-can holding the optical component.

Referring to claim 25, the prior art does not disclose all the limitations of the claimed invention. The prior art does not disclose the electro-optical module as claimed, including: the core of the first optical waveguide being larger than the core of the second optical waveguide.

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Referring to claim 29, the prior art does not disclose all the limitations of the claimed invention. The prior art does not disclose the electro-optical module as claimed, including: the inclined surface of the first waveguide section and the inclined end surface of the second waveguide section are adjacent and form a 50/50 beam splitter.

Referring to 31, the prior art does not disclose all the limitations of the claimed invention. The prior art does not disclose the optical waveguide structure as claimed, including: a first glass ferrule; a second glass ferrule; where the first glass ferrule receives the first optical waveguide section and has an end surface that is inclined to correspond to the inclined end surface of the first optical waveguide section; where the second glass ferrule receives the second optical waveguide section and has an end surface that is inclined to correspond to the inclined end surface of the second optical waveguide section; and where both ferrules are transparent.

Referring to claim 32, the prior art does not disclose all the limitations of the claimed invention. The prior art does not disclose the optical waveguide structure as claimed, including: the first optical waveguide section and the second optical waveguide section defining a gap therebetween; and an immersion means filling the gap, and having a matched refractive index.

Referring to claim 33, the prior art does not disclose all the limitations of the claimed invention. The prior art does not disclose the optical waveguide structure as claimed, including: the core of the first optical waveguide being larger than the core of the second optical waveguide.

Referring to claim 34, the prior art does not disclose all the limitations of the claimed invention. The prior art does not disclose the optical waveguide structure as claimed, including: the inclined surface of the first waveguide section and the inclined end surface of the second waveguide section are adjacent and form a 50/50 beam splitter.

### ***Conclusion***

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

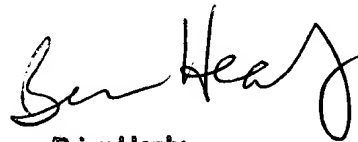
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin S Wood whose telephone number is (703) 605-5296. The examiner can normally be reached on Monday-Thursday (7am - 5:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney B Bovernick can be reached on (703) 308-4819. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9318 for regular communications and (703) 872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 307-0956.

KSW  
June 11, 2002

A handwritten signature in black ink, appearing to read "Brian Healy", with a stylized flourish at the end.

**Brian Healy**  
**Primary Examiner**